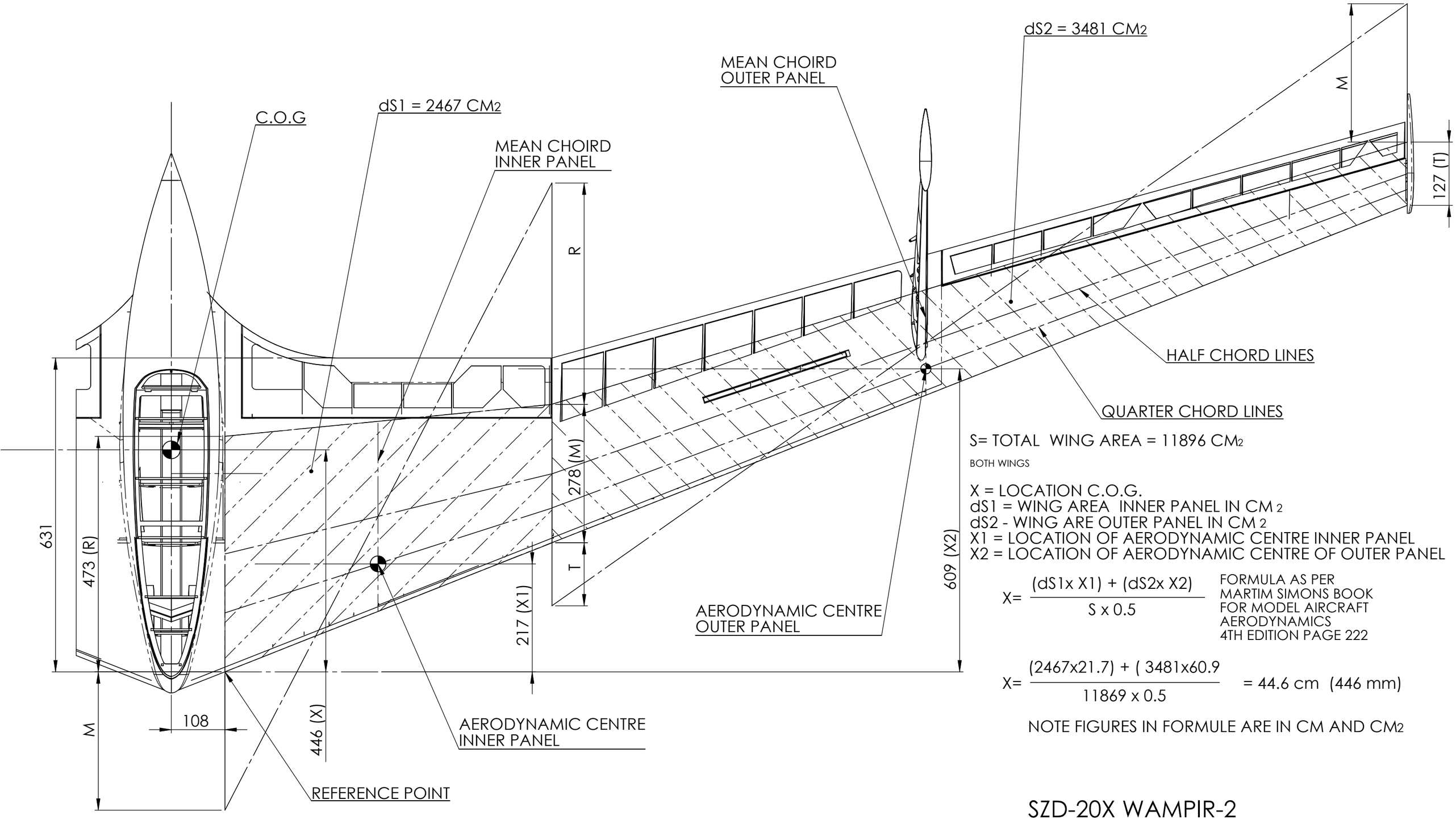

S= TOTAL WING AREA = 11896 CM2

BOTH WINGS

X = LOCATION C.O.G.
dS1 = WING AREA INNER PANEL IN CM 2
dS2 - WING ARE OUTER PANEL IN CM 2
X1 = LOCATION OF AERODYNAMIC CENTRE INNER PANEL
X2 = LOCATION OF AERODYNAMIC CENTRE OF OUTER PANEL

$$X = \frac{(dS1 \times X1) + (dS2 \times X2)}{S \times 0.5}$$

FORMULA AS PER
MARTIM SIMONS BOOK
FOR MODEL AIRCRAFT
AERODYNAMICS
4TH EDITION PAGE 222

$$X = \frac{(2467 \times 21.7) + (3481 \times 60.9}{11869 \times 0.5} = 44.6 \text{ cm } (446 \text{ mm})$$

NOTE FIGURES IN FORMULE ARE IN CM AND CM2

SZD-20X WAMPIR-2

CALCULATION OF C.O.G LOCATION

Jilles Smits 11/11/13